III. REMARKS/ARGUMENTS

A. Status of the Claims

Claims 1-6, 8-17 and 19-37 are pending. Claims 1, 8, and 25 have been amended. Claims 36 and 37 have been added. No new matter is introduced by this amendment, and this amendment is fully supported by the specification. Claims 7 and 18 have been cancelled, without prejudice. Applicants respectfully request reconsideration of the rejections of these claims for at least the following reasons.

B. Claim Rejections Under 35 U.S.C. § 102(e)

Claims 1-19, 23-31, and 35 stand rejected under 35 U.S.C. § 102(e) as allegedly anticipated by U.S. Patent Application Pub. No. US 2002/0099571 A1 to Waku et al. ("Waku"). To facilitate Applicants' remarks, the claims will be discussed in two groups.

a. Independent Claims 1 And 8

The Office Action asserts:

Waku discloses a method of configuring a scan in an imaging device comprising data acquisition for a first patient (figure 4) wherein basic patient information is input (paragraph 172). ... As shown in figures 5 and 6, there are multiple processes for each patient as well as multiple patients in the database. The system may execute medical works, such as the processes shown in figures 5 and 6, relating to a plurality of patients in parallel in a single apparatus (paragraph 36). Therefore it is interpreted that the patient identification step for a second patient may take place in parallel with the scan of a prior patient (figure 5). ... Parameters for a scan are entered, such as the contrast medium desired (paragraph 141) and the plans for the scan, or scan protocol (paragraph 142). A controller allows processes to be executed automatically, including executing parallel processes, which allows the steps to be completed in a single action (paragraph 52).

Office Action, Pages 2-3 (emphasis added). Applicants respectfully disagree.

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In order for a claim to be anticipated by a reference, that reference must disclose each and every element of the claimed invention. *See Verdegaal Bros. v. Union Oil Co. of California*, 814 F.2d 628, 631 (Fed. Cir. 1987) ("A claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference."); *see also Richardson v. Suzuki Motor Co.*, 868 F.2d 1226, 1236 (Fed. Cir. 1989) ("The identical invention must be shown in as complete detail as is contained in the . . . claim."). Independent claim 1 recites:

> 1. A method of configuring a scan in an imaging device, the method comprising the steps of:
>
> beginning a data acquisition step for a first scan;
>
> <u>during the data acquisition step for the first scan, completing a data entry step relating to a second scan, the data entry step including entering scan configuration data related to the second scan into a scan processing unit;</u>
>
> completing the data acquisition step for the first scan; and
>
> beginning a data acquisition step for the second scan.

Appl'n, Claim 1 (as amended) (emphasis added).[1] As indicated by the emphasized text, claim 1 requires (1) that the data entry step relating to a second scan is started <u>after</u> the data acquisition step for the first scan is started and is completed <u>before</u> the data acquisition for the first scan is completed, and (2) that scan protocol data relating to the second scan <u>is entered into a scan processing unit</u> during the data entry step.

Applicants submit that the Office Action is reading the disclosure of Waku too broadly. Waku discloses "a system to be connected via a network to a plurality of medical systems installed in a medical institution, configured to manage various

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[1] Independent claim 8 recites similar limitations.

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works performed at the medical systems." Waku, ¶ 0013. Waku further discloses that "[v]arious systems for the management of the medical work as an object by the stream are considered. Examples include a system for executing medical works relating to a plurality of patients in parallel, in a single apparatus." Waku, ¶ 0036. Based on this disclosure alone, the Office Action contends that Waku discloses that the patient identification step for a second patient may take place in parallel with the scan of a prior patient." Office Action, pages 2-3. This is an improper reading of Waku, as later in the disclosure, Waku discloses that "a plurality of examinations are sometimes performed in parallel." Waku, ¶ 191,[2] but only discloses that scan processing and film processing are performed in parallel. Waku, ¶ 0192. Scan processing and film processing occurring in parallel is not the same as data acquisition for a first scan and data input for a second scan occurring in parallel.

In one example, Waku discloses a CT scan examination procedure in which some information relating to a patient's scan may be entered prior to the patient arriving at the scanning equipment. Specifically, Example 1 discloses that, once a patient arrives at a hospital, a stream for the patient is issued. Waku, ¶ 0134. Although not specifically disclosed, based on the rest of Waku's disclosure, the initial processing would involved inputting basic patient information into the hospital information system ("HIS"). In this example, following an examination, if a doctor prescribes an order for a CT examination, the order is sent to the radiology information system ("RIS"). Waku, ¶ 0137. The doctor requesting the scan can

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[2] This example appears to be the embodiment referred to in paragraph 36 ("Examples include a system for executing medical works relating to a plurality of patients in parallel, in a single apparatus .... The application to various systems will be described later in respective embodiments.") and cited by the Office Action to support its interpretation that "the patient identification step for a second patient may take place in parallel with the scan of a prior patient." Office Action, Page 2.

select content from a template, and can also enter a "simple instruction, such as 'a standard head scan, scan template in the CT apparatus, MPR or 3D preparation template, template of a fine process such as filming and archiving, and parameters used in the template.'" Waku, ¶ 138. This information is <u>not</u> disclosed as being entered into the scan processing unit, however. Instead, this information entered into the stream for the hospital. Waku, ¶ 0136. Waku then discloses that the examinations then "proceed according to the list" of patients on the examination schedule. Waku, ¶ 140.

At this point, Waku discloses that the radiation section then checks content and enters additional information. Waku, ¶ 141. After the scan is completed,

> in accordance with the patient, site, and case, image check is performed. Also in this case, since a check method is preset in accordance with the scan content and operator, the method is used as it is, or changed, and the image is checked. Re-scan or reconstruction retry is performed based on the result. When the check operation ends, the operation is shifted to the next process by the "Next" button. As described above, in the stream, from issuance of the stream to the end, the flow of the stream can proceed in the order of processes in the stream.

Waku, ¶ 0145. Thus, Waku essentially describes a streamlined process for requesting an examination and entering patient information, but does not disclose "during the data acquisition step for the first scan, completing a data entry step relating to a second scan, the data entry step including entering scan configuration data related to the second scan into a scan processing unit." Therefore, Applicants respectfully request that the rejection of these claims be withdrawn.

In addition, throughout its disclosure, the only data that Waku discloses as being entered before scanning is the entry of "basic information of a health insurance card and the like." Waku, ¶ 0172. This "basic information" is simply

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patient identification information, <u>not</u> "scan protocol data related to the second scan." Further, this information is not entered into a scan processing unit for the scanner, but rather into the Hospital Information System ("HIS") database. Waku, ¶ 0171. Therefore, Waku does not disclose this element.

Although Applicants do not necessarily agree with the Office Action, in order to more precisely point out and distinctly claim Applicants' invention, Applicants have amended claims 1 and 8 to specify that the data entry step includes "entering scan protocol data related to the second scan into a scan processing unit." Therefore, in view of these differences, Applicants respectfully request that the rejection of independent claims 1 and 8, and the claims dependent thereon, be withdrawn.

   b.   <u>Independent Claims 19 And 30</u>

The Office Action further asserts:

Before a patient is scanned, they go through the steps of patient identification, scanning, reconstruction, image processing, etc. in the order they are provided. Additionally, a patient identification card is used to prevent a patient from being mistaken and is used to start the treatment, for example the imaging, or the patient (paragraph 187). The database of all patients may be queried to determine the next patient, for example obtaining a list of patients for the entire radiation section or only for one particular imaging system or the time the exam is schedule (figure 7). A filter is used to limit the display to desired information (paragraph 109). Information may be downloaded from a central or global database (figure 16) and also may be entered locally, as previously described. Parameters for a scan are entered, such as the contrast medium desired (paragraph 141) and the plans for the scan, or scan protocol (paragraph 142). A controller allows processes to be executed automatically, including executing parallel processes, which allows the steps to be completed in a single action (paragraph 52).

Office Action, Page 3. Applicants respectfully disagree.

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Independent claim 19 recites:

19. A method for configuring an imaging device comprising the steps of:

specifying at least one criterion for determining a next patient to be scanned from a plurality of scheduled patients;

querying a database with the at least one criterion; and

receiving an identification of the next patient to be scanned based on the at least one criterion.

Appl'n, claim 19 (emphasis added).[3] According to an embodiment of the present invention,

> To further enhance the efficiency of the scanner, the patient schedule software 33 may include a feature for automatically configuring the scanner (e.g., loading the previously entered data) for the second patient at the conclusion of the scan of the first patient. This feature allows the operator to specify one or more criteria for determining the next patient from the list of patients stored in the local worklist database 37. The processor 32 can then determine the next patient according to the stored criteria and automatically configure the scanner for that patient by retrieving the necessary patient information from the local worklist database 37.

> * * *

> [T]he patient schedule software 33 applies the criteria to determine the next patient from the list of patients stored in the local worklist database 37. For example, at the start of each patient exam, the operator can click a button 66 on the work station screen to cause the patient schedule software 33 to determine the next patient based on the criteria stored in the preferences database 39. In this case, as shown in FIG. 11, the patient schedule software 33 retrieves the user defined preferences from the preferences database 39 and uses the preferences to construct a query directed to the local worklist database 37. In response to the query, the local worklist database 37 produces results in the form of identifying the next patient and providing worklist data associated with that patient. For example, as shown in

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[3] Independent claim 30 recites similar limitations.

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FIG. 11, the patient schedule software 33 causes a patient screen to be
displayed which, in addition to specifying the name of the patient,
also shows a patient ID. birth date, gender, symptoms, and other
desired data from the local worklist database 37 such as patient, exam,
and tracer information

Appl'n, ¶ 0042 -45 (emphasis added).

Contrary to the Office Action's assertion, Waku does not disclose at least the
emphasized elements of claim 19. Waku discloses the use of "filters" to display
information in "a predetermined division." Waku, ¶ 0109. Waku's Fig. 7,
reproduced below, illustrates "when the display filter is changed for the whole
section, a plurality of CT apparatuses, the whole hospital, or a plurality of
hospitals, the list can be browsed and operated by various divisions." Id.

Today's examination list in whole radiation section

Patient A	CT1
Patient B	MR
Patient C	CT1
Patient D	CT2
Patient E	CT1

Today's examination list in whole CT apparatus

Patient A	CT1
Patient C	CT1
Patient D	CT2
Patient E	CT1
Patient F	CT1

Today's examination list in CT1

10:00	Patient A	Internal medicine
10:20	Patient C	Surgery
10:40	Patient E	Cerebral surgery
11:00	Patient F	Internal medicine
11:20	Patient 1	Internal medicine

FIG.7

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Thus, Walu only discloses a display of patients, and a way to filter the display of patients. It does not disclose the steps of "querying a database with the at least one criterion" and receiving an identification of the next patient to be scanned based on the at least one criterion. Therefore, Applicants respectfully request that the rejection of independent claims 19 and 30 be withdrawn.

C. Claim Rejections under 35 U.S.C. § 103(a)

Claims 20 and 32 stand rejected as allegedly rendered obvious by Waku in view of U.S. Patent No. 6,505,064 to Liu *et al.* ("Liu"); claims 21 and 33 stand rejected as allegedly rendered obvious by Waku in view of U.S. Patent Application Pub. No. 2004/0073453 to Nenov et al. ("Nenov"); and claims 22 and 34 stand rejected as allegedly rendered obvious by Waku in view of U.S. Patent Application Pub. No. 2003/0093296 to Lee *et al.* ("Lee"). Claims 20, 21, and 22 are dependent on independent claim 19, and claims 23, 33, and 34 are dependent on independent claim 30. As noted above, Waku fails to disclose the limitations of independent claims 19 and 30 because it does not disclose the steps of "specifying at least one criterion for determining a next patient to be scanned from a plurality of scheduled patients," "querying a database with the at least one criterion," and "receiving an identification of the next patient to be scanned based on the at least one criterion" or "wherein the processor is programmed to allow an operator to specify at least one criterion for determining a next patient to be scanned from a plurality of scheduled patients, query a patient database with the at least one criterion, and receive an identification of the next patient to be scanned based on the at least one criterion." Liu, Nenov, and Lee fail to cure these deficiencies. Therefore, Applicants respectfully request that the rejection of these claims be withdrawn.

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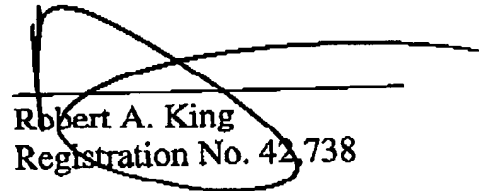
IV. CONCLUSION

Applicants respectfully submit that the application is in condition for allowance. Applicants believe that no fees are necessary in connection with the filing of this document. In the event any fees are necessary, please charge such fees, including fees for any extensions of time, to the undersigned's Deposit Account No. 50-0206. Should any outstanding issues remain, the Examiner is invited to telephone the undersigned at the number listed below.

Respectfully submitted,
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